VOL. 455 JOURNAL OF CHROMATOGRAPHY NOVEMBER 25, 1988

CONTENTS

(Abstracts/Contents Lists published in Analytical Abstracts, ASCA, Biochemical Abstracts, Biological Abstracts, Chemical Abstracts, Chemical Titles, Chromatography Abstracts, Current Contents/Physical, Chemical & Earth Sciences, Current Contents/Life Sciences, Deep Sea Research/Part B: Oceanographic Literature Review, Excerpta Medica, Index Medicus, Mass Spectrometry Bulletin, PASCAL-CNRS, Referativnyi Zhurnal and Science Citation Index)

Resolution of colloidal latex aggregates by sedimentation field-flow fractionation
by H. K. Jones, B. N. Barman and J. C. Giddings (Salt Lake City, UT, U.S.A.) (Received August 18th, 1988) 1

Consecutive gradients in chromatography. Gradients under sub- and supercritical conditions including composition gradients and multiple gradients
by B. Gemmel, F. P. Schmitz and E. Klesper (Aachen, F.R.G.) (Received July 26th, 1988) 17

Retention behaviour of polycyclic aromatic hydrocarbons in supercritical fluid chromatography on various chemically bonded stationary phases with carbon dioxide as a mobile phase
by K. Jinno and S. Niimi (Toyohashi, Japan) (Received July 13th, 1988) 29

Determination of partition coefficients by headspace gas chromatography
by W. J. Jones, M. J. Egoville, E. O. Strolle and E. S. Dellamonica (Wyndmoor, PA, U.S.A.) (Received July 27th, 1988) 45

Vapor-pressure measurement of complex hydrocarbon mixtures by headspace gas chromatography
by J. E. Woodrow and J. N. Seiber (Davis, CA, U.S.A.) (Received July 14th, 1988) . . . 53

Determination of the solubility of vapours in polymers by automated headspace gas chromatography
by K. Schoene, J. Steinhanses and A. König (Schmallenberg-Grafschaft, F.R.G.) (Received May 16th, 1988) 67

Retention reproducibility of basic drugs in high-performance liquid chromatography on a silica column with a methanol–ammonium nitrate eluent. Batch-to-batch reproducibility of the stationary phase
by R. M. Smith, T. G. Hurdley and J. P. Westlake (Loughborough, U.K.) and R. Gill and M. D. Osselton (Reading, U.K.) (Received August 23rd, 1988) 77

Ultrasound driven synthesis of reversed-phase stationary phases for liquid chromatography using 4-dimethylaminopyridine as acid-acceptor
by K. B. Sentell, K. W. Barnes and J. G. Dorsey (Gainesville, FL, U.S.A.) (Received July 21st, 1988) 95

Gas phase silylation, a rapid method for preparation of high-performance liquid chromatography supports
by P. Wikström, C. F. Mandenius and P.-O. Larsson (Lund, Sweden) (Received May 17th, 1988) 105

Degradation and analysis of polyoxyethylene monoalkyl ethers in the presence of acetyl chloride
by J. Szymanowski (Poznań, Poland) and P. Kusz, E. Dziwiński and Cz. Latocha (Kędzierzyn-Koźle, Poland) (Received July 11th, 1988) 119

Chemical degradation and analysis of polyoxyethylene glycols and ethylene oxide–α-butylene oxide block copolymers
by J. Szymanowski (Poznań, Poland) and P. Kusz and E. Dziwiński (Kędzierzyn-Koźle, Poland) (Received June 16th, 1988) 131

Flavor characterization of dentifrices using equilibrium headspace gas chromatography
by R. S. Robinson, E. A. Tavss, J. Santalucia and D. L. Carroll (Piscataway, NJ, U.S.A.) (Received May 25th, 1988) 143

(Continued overleaf)

Cross-axis synchronous flow-through coil planet centrifuge for large-scale preparative counter-current chromatography. III. Performance of large-bore coils in slow planetary motion
by Y. Ito (Bethesda, MD, U.S.A.) and T.-Y. Zhang (Beijing, China) (Received June 29th, 1988) 151

Identification of organophosphorus insecticides and their hydrolysis products by liquid chromatography in combination with UV and thermospray–mass spectrometric detection
by A. Farran, J. De Pablo and D. Barceló (Barcelona, Spain) (Received July 18th, 1988) . 163

Adaptation d'une méthode d'analyse des acides aminés, par chromatographie liquide haute performance, dans les sèves xylémiques
par P. Brunet, B. Sarrobert et N. Paris-Pireyre (Montpellier, France) (Reçu le 26 juillet 1988) 173

Resolution of diastereomers of N,N,N′,N′-tetrakis(2-hydroxypropyl)ethylenediamine (Quadrol) by reversed-phase high-performance liquid chromatography
by J. A. Fulton, H. K. Pokharna, M. J. Dunphy and D. J. Smith (Akron, OH, U.S.A.) (Received June 15th, 1988) 183

Purification of diethylenetriamine-N,N,N′,N″-tetraacetic acid-N″-propionic acid using anion-exchange displacement chromatography
by D. J. Sawyer, J. E. Powell and H. R. Burkholder (Ames, IA, U.S.A.) (Received August 4th, 1988) 193

Design and applications of biomimetic anthraquinone dyes. II. The interaction of C.I. Reactive Blue 2 analogues bearing terminal ring modifications with horse liver alcohol dehydrogenase
by S. J. Burton (Cambridge, U.K.), C. V. Stead (Manchester, U.K.) and C. R. Lowe (Cambridge, U.K.) (Received July 25th, 1988) 201

Resolution of the intermediates of *de novo* purine biosynthesis by ion-pair reversed-phase high-performance liquid chromatography
by R. G. Hards and D. Patterson (Denver, CO, U.S.A.) (Received July 20th, 1988) . . . 217

Purification of lentil lectins using preparative electrophoresis
by P. Wenger, A. Heydt, N. B. Egen, T. D. Long and M. Bier (Tucson, AZ, U.S.A.) (Received July 5th, 1988) 225

Determination of phenols by liquid chromatography using reductive electrochemical detection via precolumn derivatization
by C.-Y. Li and M. W. Kemp (Greenville, NC, U.S.A.) (Received June 6th, 1988) 241

Determination of phosphate and phosphite in plant material by gas chromatography–mass spectrometry and ion chromatography
by R. H. Smillie and B. Grant (Parkville, Australia) and R. L. Cribbes (Melbourne, Australia) (Received July 14th, 1988) 253

Retention and heats of adsorption of hydrocarbons and aliphatic alcohols on cellulose
by L. I. Dernovaya and Yu. A. Eltekov (Moscow, U.S.S.R.) (Received August 11th, 1988) 263

Liquid chromatographic determination of alliin in garlic and garlic products
by E. Mochizuki and A. Nakayama (Kofu, Japan), Y. Kitada (Nara, Japan), K. Saito (Saitama, Japan) and H. Nakazawa, S. Suzuki and M. Fujita (Tokyo, Japan) (Received August 9th, 1988) 271

Simultaneous high-performance liquid chromatographic determination of propoxyphene and acetaminophen in pharmaceutical preparations
by T. L. Ascah and B. T. Hunter (Bellefonte, PA, U.S.A.) (Received July 20th, 1988) . . 279

Purification of phosphofructokinase using transition-state analogue affinity chromatography
by S. P. J. Brooks and K. B. Storey (Ottawa, Canada) (Received August 1st, 1988) . . . 291

Notes

Damage to gas chromatographic columns caused by peroxides in liquid chromatographic eluents for coupled liquid chromatography–gas chromatography
by K. Grob (Zürich, Switzerland) and Z. Li (Chengdu, China) (Received August 18th, 1988) 297

Identification of alkylbenzenes up to C_{12} by capillary gas chromatography and combined gas chromatography–mass spectrometry. I. OV-101 as stationary phase
by E. Matisová, M. Rukríglová, J. Krupčík, E. Kovačičová and Š. Holotík (Bratislava, Czechoslovakia) (Received July 14th, 1988) 301

Effect of pH on the reaction of 2,4-dinitrophenylhydrazine with formaldehyde and acetaldehyde
by M. K. L. Bicking and W. M. Cooke (Columbus, OH, U.S.A.) and F. K. Kawahara and J. E. Longbottom (Cincinnati, OH, U.S.A.) (Received August 25th, 1988) 310

Use of mobile phase modifiers to alter retention and stereoselectivity on a bovine serum albumin high-performance liquid chromatographic chiral stationary phase
by I. W. Wainer and Y.-Q. Chu (Memphis, TN, U.S.A.) (Received August 9th, 1988) . . 316

Isothiocyanate as a liquid crystalline stationary phase in capillary gas chromatography for the separation of polyaromatic hydrocarbons
by J. Mazur, Z. Witkiewicz and R. Dąbrowski (Warsaw, Poland) (Received August 2nd, 1988) 323

Temperature programming in high-performance liquid chromatography
by S. U. Sheikh and J. C. Touchstone (Philadelphia, PA, U.S.A.) (Received July 22nd, 1988) 327

High-sensitivity laser-induced fluorescence–high-performance liquid chromatography studies of polyaromatic hydrocarbons using the argon ion laser–Yeung detector cell configuration
by M. C. Roach and M. D. Harmony (Lawrence, KS, U.S.A.) (Received August 2nd, 1988) 332

Simultaneous determination of thiols and corresponding disulphides in mixtures by high-performance liquid chromatography with polarographic detection using a Dual-Tast Analyser
by B. Dębowska, K. Samochocka, M. Przasnyski and D. Sybilska (Warsaw, Poland) (Received July 18th, 1988) 336

Separation of thiols on Spheron Ara activated with 2-nitrophenylhydrazonopropandinitrile ligand
by D. Podhradský and M. Antalík (Košice, Czechoslovakia) and E. Šturdík (Bratislava, Czechoslovakia) (Received August 9th, 1988) 344

Derivatisation of amines with O-acetylsalicyloyl chloride to enhance electrochemical detection in high-performance liquid chromatography
by R. M. Smith, A. Abdul Ghani, D. G. Haverty, G. S. Bament, A. Y. Chamsi and A. G. Fogg (Loughborough, U.K.) (Received July 25th, 1988) 349

Development of an high-performance liquid chromatographic method for the simultaneous analysis of the species involved in diethyl L-tartrate hydrolysis
by D. S. Kalonia and A. P. Simonelli (Storrs, CT, U.S.A.) (Received August 2nd, 1988) . 355

Simultaneous collection of the eluate from up to twenty liquid chromatographic columns by a minor modification to the fraction collector
by F. Marquard and O. Sonne (Aarhus, Denmark) (Received July 20th, 1988) 360

Measurement of methylated DNA purines by reversed-phase high-performance liquid chromatography and fluorimetric detection
by A. M. Tacchi-Bedford (London, U.K.) (Received August 30th, 1988) 364

Étude par chromatographie liquide haute performance des métabolites potentiels de la caféine. Comparaison de différentes techniques
par M. F. Vergnes, C. Grosset et J. Alary (La Tronche, France) (Reçu le 25 juillet 1988) . 369

Activity stain for polygalacturonase
by T. A. McKeon (Albany, CA, U.S.A.) (Received August 29th, 1988) 376

(Continued overleaf)

Contents (continued)

Indirect fluorimetric detection of non-electrolytes in thin-layer chromatography
by Y. Ma and E. S. Yeung (Ames, IA, U.S.A.) (Received June 15th, 1988) 382

Gas chromatographic determination of chloroacetamide herbicides in plants and soil
by A. Balinova (Sofia, Bulgaria) (Received June 15th, 1988) 391

Simultaneous separation and identification of carotenoids and chlorophylls in turf bermudagrass by high-performance liquid chromatography
by C. A. Bailey and B. H. Chen (College Station, TX, U.S.A.) (Received September 8th, 1988) 396

Separation of RNA and DNA by histone affinity high-performance liquid chromatography
by C. P. Holstege, M. J. Pickaart and L. L. Louters (Grand Rapids, MI, U.S.A.) (Received June 22nd, 1988) 401

Procyanidines galloylées du sarment de vigne (*Vitis vinifera*). Séparation et identification par chromatographie liquide haute performance et chromatographie en phase gazeuse
par M. Boukharta, M. Girardin et M. Metche (Vandoeuvre, France) (Reçu le 11 août 1988) 406

Determination of geniposide, gardenoside, geniposidic acid and genipin-1-β-gentiobioside in *Gardenia jasminoides* by high-performance liquid chromatography
by T. Oshima, K. Sagara and T. Yoshida (Saitama, Japan) and Y.-Y. Tong, G. Zhang and Y.-H. Chen (Beijing, China) (Received July 21st, 1988) 410

Quantitative high-performance liquid chromatographic determination of ampicillin embonate and amoxycillin embonate
by T. Saesmaa (Helsinki, Finland) (Received June 13th, 1988) 415

Application of amperometric detection to the high-performance liquid chromatographic determination of antipyrine and 4-aminoantipyrine in urine
by A. Burcinová, M. Tichý, V. Pacáková and K. Štulík (Prague, Czechoslovakia) (Received July 25th, 1988) 420

Liquid chromatographic determination of trace amounts of low-molecular-weight fatty acid vapours in industrial emissions
by K. Kuwata and S. Tanaka (Osaka, Japan) (Received July 4th, 1988) 425

High-performance liquid chromatographic determination of hinokitiol in cosmetics by the formation of difluoroborane compounds
by M. Endo, T. Mizutani and M. Matsumura (Osaka, Japan) and M. Moriyasu, M. Ichimaru, A. Kato and Y. Hashimoto (Hyogo, Japan) (Received June 23rd, 1988) 430

High-performance affinity chromatography of human progesterone receptor
by D. M. Boyle and L. A. van der Walt (Johannesburg, South Africa) (Received July 2nd, 1988) 434

Separation of some rodenticides and related compounds by thin-layer chromatography
by K. Opong-Mensah (Richmond, CA, U.S.A.) and W. R. Porter (North Chicago, IL, U.S.A.) (Received August 24th, 1988) 439

Book Reviews

Introduction to microscale high-performance liquid chromatography (edited by D. Ishii) 444

Quantitative gas chromatography for laboratory analyses and on-line process control (by G. Guiochon and C. L. Guillemin), reviewed by J. Janák 445

Author Index 446

In articles with more than one author, the name of the author to whom correspondence should be addressed is indicated in the article heading by a 6-pointed asterisk (*)